

ABSTRACT

In a regenerator to be formed by winding a resin film (8) into a cylindrical shape, a dimple (10) is formed on a surface of the resin film (8) by subjecting the resin film (8) in itself to plastic deformation, either by stamping or by laser beam irradiation. Thereafter, the resin film (8) is stacked. The dimple (10) provides a gap between layers of the stacked resin film (8) to be a flow passage for a working gas. Thus, a regenerator of high heat exchange efficiency is provided with ease and at low cost.